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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,578	08/07/2003	Toshihisa Ozu	241300US2	8301

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EXAMINER	
SINGH, RAMNANDAN P	
ART UNIT	PAPER NUMBER
2614	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/25/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/25/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)	
Office Action Summary	10/635,578	OZU, TOSHIHISA	
	Examiner	**Art Unit**	
	Ramnandan Singh	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :(i) Aug. 03, 2003, (ii)Jul. 03, 2006.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy in Japanese has been filed on Aug. 07, 2003.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ubale et al [US 20030231617 A1] in view of Pang et al [US 20030112758 A1].

Regarding claim 1, Ubale et al teach an IP network communication apparatus including a transmitting means for converting a digital signal delivered from a public switched telephone network into IP packets, and for transmitting the IP packets to an opposing station by way of an IP network,

and a receiving means for, when receiving IP packets from the opposing station by way of the IP network, converting the IP packets back to a digital signal and sending out it onto the public switched telephone network, the IP network communication apparatus, as shown in Fig. 1 [Para: 0022-0023], comprising:

a digital signal storage means (card 230 or DSP 310) for storing digital signals transmitted to the IP network communication apparatus from the public switched telephone network therein [Figs. 2-4; Para: 0024-0026]; and

an echo removing means (550) for removing a far side echo superimposed on the digital signal, which is sent out onto the public switched telephone network by the receiving means, by using a digital signal that is selected from among digital signals stored in the digital signal storage means and that was stored the transmission path delay time earlier [Fig. 5; Para: 0027-0028; 0031; Fig. 6; 0032-0036].

Although Ubale teaches jitter buffer management using either media processing cards (230) or DSP (310) [Figs. 2-3; Para: 0024-0025], he does not teach expressly a delay calculation means.

Pang et al teach an IP network (2185) [Fig. 21] having an estimate of buffer size [Para: 0186] using a delay calculating means for transmitting a control packet including time of transmission of the control packet to the opposing station by way of the IP network, and for, when receiving the control packet sent back thereto from the opposing station by way of the IP network, calculating a transmission path delay that IP packets undergo during one round trip between the IP network communication apparatus and the opposing location from time of the receipt of the control packet and the transmission time contained in the control packet [Para: 0011; 0051-0055; 0067-0069; 0076; 0081; 0083-0093].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Pang et al with Ubale in order to determine actual packet delays necessary to determine optimal packet buffer size for real-time communications [Pang et al; Para: 0006; 0009].

Regarding claim 2, the combination of Ubale and Pang et al further teaches the IP network communication apparatus, wherein the delay calculating means (scheduler 955) calculates the transmission path delay at predetermined intervals (i.e. frame tasks) [Pang et al Para: 0133; 0136].

Regarding claim 3, the combination of Ubale and Pang et al further teaches the IP network communication apparatus, wherein the delay calculating means (scheduler 955) calculates the transmission path delay when receiving an instruction for the calculation of the transmission path delay [Pang et al; Para: 0133; 0136].

Regarding claim 4, Ubale further teaches the IP network communication apparatus, wherein the digital signal which is converted into IP packets by the transmitting means is a sound signal [Fig. 1; referral 110], and the digital signal which the receiving means sends out onto the public switched telephone network is a sound signal [Fig. 1; referral 170].

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Welin [US 20060007871 A1] teaches scheduling tasks by any single "frame task" at a predetermined interval of time [Figs. 1-8; Para: 0167].

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh
Examiner
Art Unit 2614